REMARKS/ARGUMENTS

This Amendment is responsive to the Office Action mailed on May 19, 2003. A Request for Continued Examination (RCE) and a Petition for a 1-month extension of time are attached.

Prior to this Amendment, claims 1-3, 5-16, and 24-25 were pending and claims 4, and 16-23 were canceled. In this Amendment, no claims are canceled or added, and claims 1, 8, 11, 15, and 24 are amended so that claims 1-3, 5-16, and 24-25 are pending and subject to examination on the merits.

Support for the changes to independent claims 1 and 11 can be found, for example, at page 5, lines 16-25, page 13, lines 15-20, and page 15, lines 20-30 of the specification. No new matter is added.

Initially, Applicants respectfully request that the finality of the prior Office Action be withdrawn. While the Examiner indicates at paragraph 59 of the Office Action that the "Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action," Applicants' amendment to independent claim 1 in the prior Amendment was the incorporation of the limitation in dependent claim 4. Claim 4 was rejected as obvious over Yamada et al. (U.S. Patent No. 5,501,739) and Hayashi et al. (U.S. Patent No. 5,578,130) in the Office Action mailed on October 28, 2002. Even though the same claim was presented twice, the Examiner has now added an additional obvious rejection in view of Garriga (US Patent No. 6,451,118) and Hayashi et al. Thus, the new rejection based on Garriga was not necessitated by Applicants' amendment. Accordingly, Applicants request that the finality of the pending Office Action be withdrawn, and that the RCE fee be refunded to Applicants.

35 USC 103- Garriga and Hayashi et al.

Turning now to the rejections of record, claims 1, 3, and 6-10 are rejected as obvious over Garriga and Hayashi et al.

Neither Garriga nor Hayashi et al., alone or in combination, teach or suggest an apparatus for forming a first dielectric layer and a second layer on a substrate, wherein the

apparatus comprises, *inter alia*, "a first atmospheric deposition station comprising a first material used to form the first dielectric layer on the semiconductor substrate", and "a second atmospheric deposition station comprising an atmospheric pressure vapor deposition chamber and comprising a second material used to form the second layer on the semiconductor substrate" as in independent claim 1.

The Examiner alleges that the Garriga discloses a first atmospheric deposition station and refers to col. 5, lines 45-49 and col. 6, lines 34-38. Applicants have reviewed these passages and cannot find the word "deposition" in them anywhere. The "atmospheric" processing areas described by Garriga are "pre-processing" or "post-processing" stations that perform processes such as chemical treatment, scrubbing, or spraying (see col. 5, lines 32-57 and col. 6, lines 1-47). None of the atmospheric processing areas are for depositing layers on a semiconductor substrate.

Even the vacuum process stations in Garriga are not used for depositing layers on a semiconductor substrate. Col. 7, lines 12-19 state that vacuum processing stations 520, 522, 524, or 526 are used for plasma ashing, plasma pattern etching, or gas phase HF processing. None of these exemplary process are for depositing layers on a semiconductor substrate, but are for removing layers of material on a semiconductor substrate. Garriga's apparatus is specifically designed to process wafers using sulfur trioxide (col. 2, line 33). As explained in U.S. Patent No. 5,037,506, which is cited in Garriga, sulfur trioxide is used to "strip" material from a wafer, and is not used to deposit materials on a wafer. Accordingly, there is clearly no teaching or suggestion in Garriga of an apparatus like the ones previously or currently claimed.

To expedite the prosecution, Applicants have amended independent claim 1 to indicate that the apparatus is used for forming first and second layers on a semiconductor substrate, and that the first and second atmospheric deposition stations respectively comprise first and second materials used for forming the first and second layers on the semiconductor substrate. These changes would distinguish from any interpretation that, for example, Garriga's rinsing stations would be included in the atmospheric deposition stations in claim 1.

Hayashi et al. is relied upon to teach the use of a plasma system with an atmospheric chemical vapor deposition system for hardening or improving the surface of plastic,

glass, or an organic photo sensitive body, or for the prevention of reflection of a surface. Hayashi et al. fails to remedy the deficiencies of Garriga mentioned above. As noted above, Garriga does even teach or suggest depositing layers on a substrate, but rather teaches an apparatus that is used to remove materials from a substrate. Accordingly, there is no reason for the skilled artisan to modify Garriga "to harden or improve the surface of plastic, glass, or an organo photo sensitive body, or for the prevention of reflection of a surface," since Garriga does not teach or suggest depositing a layer that can be hardened or improved.

35 USC 103 - Garriga, Hayashi et al., and Neoh (U.S. Patent No. 5,562,772) and/or Imahashi

Claims 2, 11, 13-15, and 25 are rejected as obvious over Garriga, Hayashi et al., and Neoh. Neoh is cited for its teaching of a spin coater. Claims 5 and 24 are rejected as obvious over Garriga, Hayashi et al., and Imahashi. Imahashi is cited for its teaching of a remote plasma system. Claim 12 is rejected as obvious over Garriga, Hayashi et al., Neoh, and Imahashi. Each obviousness rejection is traversed.

As argued above, the combination of Garriga and Hayashi et al. is deficient. The additional citation of Neoh and/or Imahashi fails to cure the deficiency of the improper citation of Garriga as a primary reference and the improper combination of Hayashi et al. and Garriga.

35 USC 103 - Yamada et al. (U.S. Patent No. 5,501,739) and Hayashi et al.

Claims 1-2, 6-11, and 14-15 are rejected as obvious over Yamada et al. and Hayashi et al. Applicants have already provided extensive arguments as to why these references are not combinable in the Amendment filed February 28, 2003. Those arguments are herein incorporated by reference.

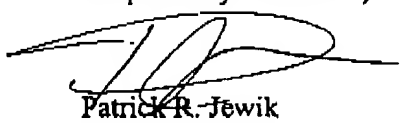
At paragraph 58 of the Office Action, the Examiner dismisses Applicants' arguments, and alleges that Hayashi et al. states that a compromise must be struck between performance and cost, and that Hayashi et al. recognize and appreciate the advantages of an apparatus capable of forming high quality coatings.

Applicants submit that Hayashi et al. does not teach an atmospheric apparatus that is useful for making semiconductors. Applicants submit that the paragraph at col. 1, lines 40-54 of Hayashi et al. suggests that one skilled in the art would not contemplate using an apparatus like the one disclosed in Hayashi et al. to produce semiconductors, since Hayashi et al. explicitly states that "even a trace amount of impurity contamination is not tolerated" and that semiconductor coatings "must" have high performance in semiconductors. Contrary to the Examiner's allegation, the statement at col. 1, lines 52-54 does not suggest that a compromise can be struck between cost and performance when making semiconductors. Rather, the cost vs. performance discussion is in the context of non-semiconductor coatings that are mass produced. The Examiner's interpretation of Hayashi et al. is not based upon what Hayashi et al. would suggest to the skilled artisan, but is based on an interpretation that would only occur after reading Applicants' own invention disclosure. In this regard, Applicants submit that the Examiner's interpretation of Hayashi et al. is based on improper hindsight, whereby the invention is rendered "obvious" by Applicants' own disclosure and not the prior art as required by § 103.

CONCLUSION

Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance is respectfully requested.

Respectfully submitted,



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